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CC: Alison Andre <andre@ecohealthalliance.org>
Sent: 1/6/2017 11:55:39 AM
Subject: Aim of the 'pathways' talk at the PREDICT meeting

I've not done slides yet, so I'll call you (CKJ) later on, but here's what I was hoping to get out of the pathways discussion...:

First point is that we know there could be some significant advances in our understanding of how and why diseases emerge that comes out of PREDICT, and that one of these involves 3 different 'pathways of emergence' that we wrote into the original proposal: Agr. Intensification (mainly for influenza), Land use change, wildlife trade (value chain).

But what we've learned from DEEP FOREST is that to do this needs a bit of deeper effort in some sites to get samples collected along gradients that would allow analyses to test hypotheses. Also, that sampling needs to be conducted in way that's standardized.

The aim of the discussion is to see if we can identify sites that represent gradients of drivers along these pathways where we can do a deeper dive to test key hypotheses on what drives risk along the 3 pathways of emergence in the original proposal. Now that we're in year 3, it's a good time to do this, and see where we can do a bit more work, and where we might actually do a bit less.

The aim is for some of these gradients to cross borders, and involve multiple PREDICT consortium partners in some cases, so that this becomes a global PREDICT product, with a big paper at the end, and some recognizable advances in how we understand disease emergence.

I've gone through our field sites with the folks here (attached) – the ones where we think they are part of a gradient for a pathway, we've listed in green, the ones that aren't are in red. Some whole countries are red, for example. Hoping we could each do that for UCD, MB and WCS, identify gradients that cross consortium partners, and get everyone's support to do this global project...

A couple of other thoughts that we might go through next week:

- The land use change pathway is already being dealt with by DEEP FOREST, I think, but maybe people want to consider other sites. The gradient is of land conversion (Pristine, semi-degraded, degraded) and time since conversion
- The Wildlife trade (animal value chain) pathway is more complex, and we'll have to think about gradients of turnover (dynamics within markets that include time animals are held there), connectivity of markets, volume/size of markets, biodiversity within markets, and the actual animal value chains so that we have points of origins of species where they're captured
- The agricultural intensification pathway would be no problem is FAO do a bunch of work on AI, but right now we will still probably have some that we can do – anyway – to discuss on the day..

Cheers,

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